

Date: Thursday, 3/23/2006 3:52:24 PM  
 User: Kim Johnston

## Process Sheet

<b>Customer</b> :	CU-DAR001 Dart Helicopters Services	<b>Drawing Name</b> :	206/OH-58 SADDLE, INBOARD, RIGHT SIDE
<b>Job Number</b> :	26371	<b>Part Number</b> :	D29392
<b>Estimate Number</b> :	10937	<b>Drawing Number</b> :	D2939 REV B
<b>P.O. Number</b> :	N/A	<b>Project Number</b> :	N/A
<b>This Issue</b> :	3/23/2006	<b>S.O. No.</b> :	N/A
<b>Prsht Rev.</b> :	NC	<b>Drawing Revision</b> :	B
<b>First Issue</b> :	3/23/2006	<b>Type</b> :	MACHINED PARTS
<b>Previous Run</b> :	24961	<b>Material</b> :	N/A
<b>Written By</b> :	<b>Due Date</b> :		4/10/2006
<b>Checked &amp; Approved By</b> :	<b>Qty:</b>		4
<b>Comment</b> :	<b>Um:</b>		Each

Comment: SEE COMMENT BELOW  
 06.03.24  
 Est: B 00.06.26 New DWG rev (mpp 2069) EC

## Additional Product

Job Number:



<b>Seq. #:</b>	<b>Machine Or Operation:</b>	<b>Description :</b>
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1.0	D6101001	7075-T7351 2X6X6.25
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**Comment:** Qty.: 1.0000 Each(s)/Unit Total: 4.0000 Each(s)

Issue material from stock: 7075-T7351 (QQ-A-250/12)

Cut Size 2.0" x 6.25" X 6.00" Grain Along 6.00" Length

Batch No: 24890

25437

J.L 06.04.15

(4) PTD

2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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**Comment:** HAAS CNC VERTICAL MACHINING #1

Program part number and batch number:

1-Inspect part number and batch number are programmed correctly.

2-Machine Step No 1 of Folio and visually inspect as per dwg D2939 & attached Dimension Sheet

3-Machine Step No 2 of Folio and visually inspect as per dwg D2939 & attached Dimension Sheet

4-Machine Step No 3 of Folio and visually inspect as per dwg D2939 & attached Dimension Sheet

5-Deburr

J.L 06.04.16 (4)

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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**Comment:** CONVENTIONAL MILLING MACHINE

Machine Keyway and inspect per attached dimension sheet

J.L 06.04.16 (4)

4.0	QC1	INSPECT ALL DIM TO DIM SHEET
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**Comment:** INSPECT ALL DIM TO DIM SHEET

J.L 06.04.16 (4)

5.0	QC8	SECOND CHECK
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**Comment:** SECOND CHECK

J.L 06.04.16 (4)

# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2939-2 PAR #: N/A Fault Category: Prod/Machined <sup>PARTS</sup> NCR: Yes No DQA: [Signature] Date: 06/04/19  
 QA: N/C Closed: [Signature] Date: 06.04.19

NCR: <u>26371</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06-04-17	2	wrong program ran on machine. D2932-2 was made B# B26371. operator error, punched in wrong folio #	[Signature]	fix folio to A D2939-2 B26371. Add D2932-2 B26371 to W/O D2932-2 B24854. Replace saddle  See Attachments	JL 06-04-17	[Signature] 06-04-17	[Signature] 06/04/17	[Signature] 06-04-17

NOTE: Date & initial all entries

Date: Thursday, 3/23/2006 3:52:24 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206/OH-58 SADDLE, INBOARD, RIGHT SIDE

Job Number: 26371

Part Number: D29392

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

*a.m 06-04-18*

*4*

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

*a.m 06-04-18*

*4*

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

*4/4/10 (4)*

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: \_\_\_\_\_

*AR 06/04/18 (4)*

10.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

*SD 06/04/19 (4)*

Job Completion



*in 06/04/19*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

<b>DART AEROSPACE LTD</b>	<b>Work Order:</b> 26371
<b>Description:</b> 206 Saddle, Inboard, Right side	<b>Part Number:</b> D2939-2
<b>Inspection Dwg:</b> D2939 Rev. B	<b>Page 1 of 1</b>

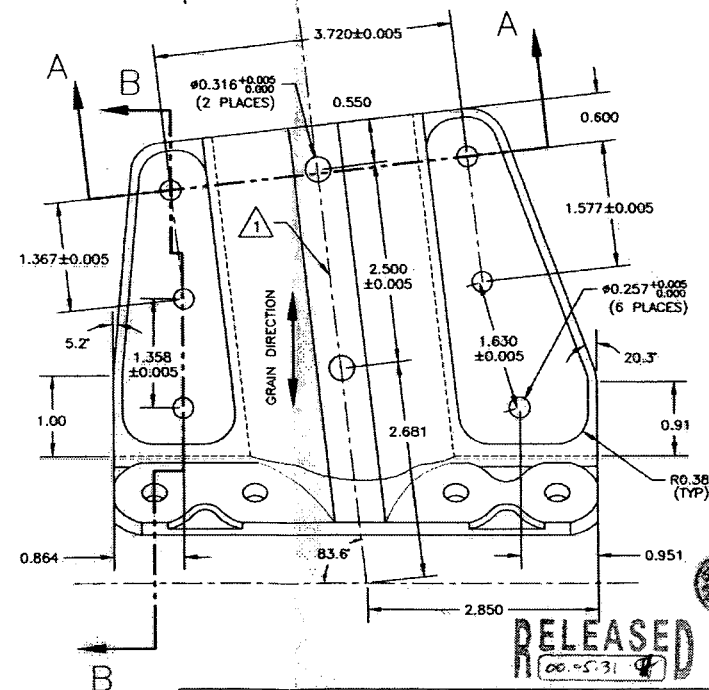
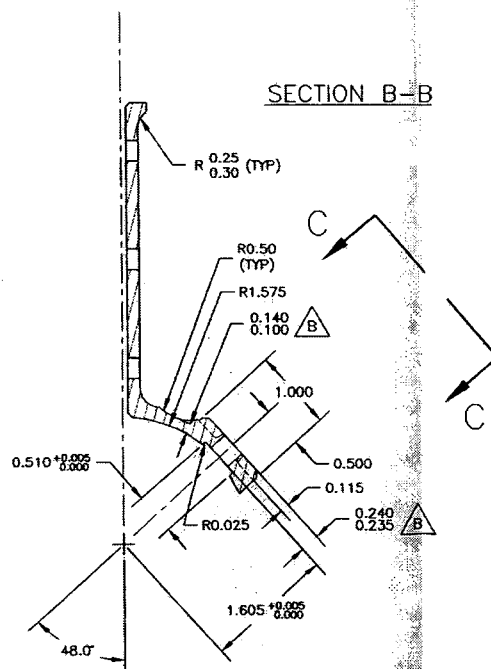
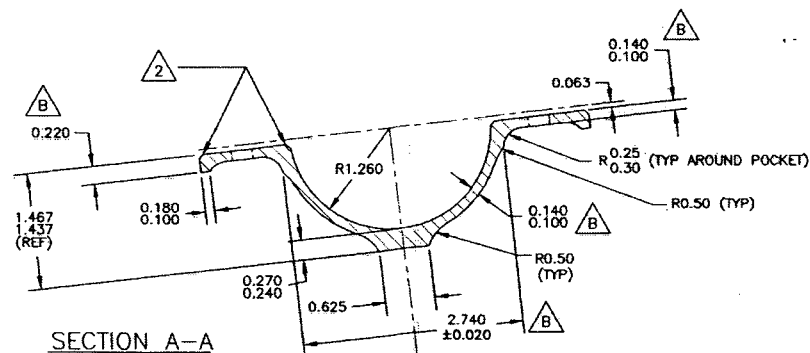
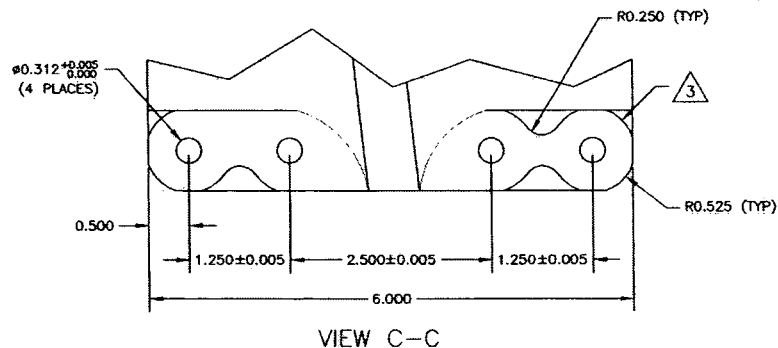
Inspect dimensions highlighted on inspection sheet drawing D2939 Rev. B and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.100	0.140		.124	.122	.122	.122		
B	0.100	0.140		.123	.122	.123	.123		
C	0.100	0.140		.120	.121	.120	.120		
D	0.210	0.230		.223	.221	.222	.224		
E	1.245	1.255		1.250	1.250	1.250	1.250		
F	1.245	1.255		1.250	1.250	1.250	1.250		
G	2.495	2.505		2.500	2.500	2.500	2.499		
H	0.510	0.515		.513	.513	.513	.513		
I	1.572	1.582		1.577	1.576	1.577	1.578		
J	2.495	2.505		2.500	2.499	2.500	2.500		
K	0.257	0.262	DT8683	✓	✓	✓	✓		
L	0.312	0.317	DT8686	✓	✓	✓	✓		
M	0.235	0.240		.240	.239	.240	.239		
N	0.100	0.140		.117	.116	.118	.117		
O	0.540	0.560		.550	.547	.548	.547		
P	0.490	0.510		.499	.500	.500	.501		
Q	3.715	3.725		3.718	3.719	3.719	3.718		
R	2.720	2.760		2.750	2.750	2.750	2.750		
S	0.240	0.270		.251	.252	.253	.250		
T	0.100	0.180		.140	.140	.140	.140		
U	1.625	1.635		1.630	1.629	1.629	1.630		
V	1.362	1.372		1.364	1.367	1.367	1.366		
W	0.316	0.321	DT8690	✓	✓	✓	✓		
X	1.250	1.270		1.258	1.260	1.261	1.261		
Y	1.565	1.585	DT8695 A/B	<del>1.565</del>					
Z									
AA									
AB									
AC									
AD									
AE									
AF									
AG									
AH									
Accept/Reject									

Measured by: J.L.
Date: 06/04/15

Audited by: J.L.
Date: 06/04/16

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.12.12	Re-format; Added Dim. X-Y, DT8683, DT8686, DT8690 & DT8695 A/B	KJ/RF	#



**D2939-1 LH SADDLE (SHOWN)**  
**D2939-2 RH SADDLE (OPPOSITE)**

MATERIAL: 7075-T7351 (QQ-A-250/12)  
 FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
 POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER  
 DART QSI 005 4.3  
 BREAK ALL SHARP EDGES 0.010 TO 0.020  
 TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA 0.010 TO 0.015 DEEP
- 2 CHAMFER 0.050" x 45° AROUND THIS SURFACE (TYP 2 PLACES)
- 3 CHAMFER 0.050" x 45°

UNCONTROLLED COPY  
 SUBJECT TO AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 NO. 26371  
 SHOP COPY  
 RETURN TO  
 ENGINEERING

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B	00.05.29	CHANGED DEOMETRY AND MATERIAL
A	99.11.12	NEW ISSUE
DESIGN	DRAWN BY RF	<b>DART</b> DART AEROSPACE USA, INC. BELLINGHAM, WA
CHECKED	APPROVED	DRAWING NO. D2939
DATE: 00.05.29		TITLE: SADDLE INSIDE
		REV. B SHEET 1 OF 1 SCALE: 2:3

Date: Monday, 11/21/2005 1:16:27 PM  
User: Linda Lacelle

## Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 206/OH-58 SADDLE, OUTBOARD, RIGHT SIDE
Job Number	: 24854		
Estimate Number	: 10832	Part Number	: D29322
P.O. Number	:	Drawing Number	: D2932 REV B
This Issue	: 11/21/2005 S.O. No. :	Project Number	:
Prsht Rev.	: NC	Drawing Revision	: B
First Issue	: / /	Material	:
Previous Run	:	Due Date	: 12/21/2005 Qty: 4 Um: Each
Written By	:		
Checked & Approved By	:		
Comment	: Est: B 00.06.26 New DWG rev (mpp 2069) EC		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	D6101003	7075-T7351 2X6.25X7.875
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REFERENCE ONLY



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)  
7075-T7351 2X6.25X7.875  
Issue material from stock: 7075-T7351 (QQ-A-250/12)  
Cut Size 2.0 x 6.25 X 7.88  
Grain Along Long 7.88 Length  
Batch No: B 25347

J.L 06.04.17

2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
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Comment: HAAS CNC VERTICAL MACHINING #1  
Program part number and batch number.  
1-Inspect part number and batch number are programmed correctly.  
2-Machine Step No 1 of Folio and visually inspect as per dwg D2932 & attached Dimension Sheet  
3-Machine Step No 2 of Folio and visually inspect as per dwg D2932 & attached Dimension Sheet  
4-Machine Step No 3 of Folio and visually inspect as per dwg D2932 & attached Dimension Sheet  
5-Deburr

3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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Comment: CONVENTIONAL MILLING MACHINE  
Machine Keyway and inspect per attached dimension sheet

4.0	QC1	INSPECT ALL DIM TO DIM SHEET
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Comment: INSPECT ALL DIM TO DIM SHEET

## WORK ORDER CHANGES

DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

REFERENCE ONLY

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE (NCR)

NCR:								
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
06-04-17	2	Chamfer tool was too low <del>on</del> the 4 <sup>th</sup> axis run and the tool ran in along the bottom of the saddle (view C-C) .040 deep. what I would be too thin when channel gets machined.		Scrap & destroy. Replace AS noted below.	J.L. 06-04-17			
06-04-17	2	02932-2 B26371 was made on w/o 02939-2 B26371. See for details.		Add 02932-2 B26371 to replace scrap saddle (above) on this w/o	J.L. 06-04-17			

NOTE: Date & initial all entries